## **Solving Proportions**

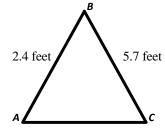
Directions: Solve each proportion. Express your answers as a mixed number or as a fraction in simplest terms.

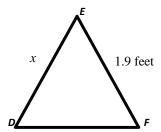
1. 
$$\frac{5}{8} = \frac{x}{32}$$

2. 
$$\frac{6}{25} = \frac{32}{x}$$

3. 
$$\frac{1.2}{x} = \frac{24}{30}$$

- 4. A 6-foot tall man casts a shadow that is 9 feet long. At the same time, a nearby flagpole casts a shadow that is 60 feet long. How tall is the flagpole?
- 5. A recipe requires  $\frac{2}{3}$  cup of brown sugar to make 20 cookies. How much brown sugar is required to make 35 cookies?
- 6.  $\triangle ABC$  is similar to  $\triangle DEF$ . Find the value of x.





7. 
$$\frac{x+12}{9x} = \frac{5}{9}$$

8. 
$$\frac{x}{20} = \frac{x-4}{5}$$

9. 
$$\frac{18+x}{14-x} = \frac{3}{7}$$